

## CLAIMS

1. A wing mirror unit, in particular for a motor vehicle, comprising a detection system for detecting an object in a blind spot of the wing mirror unit, which detection system is provided with
  - an observation unit for generating observation data;
  - 5 - a data processing unit for processing the observation data; and
  - an indication unit for displaying a warning signal,wherein internal data communication connections of the detection system are disposed in the wing mirror unit, so that the detection system is autonomous.
- 10 2. A wing mirror unit according to claim 1, wherein the autonomous detection system is provided with a slave unit connectible to a master-slave bus system in a motor vehicle.
3. A wing mirror unit according to claim 1 or 2, comprising a supporting frame on which is disposed an actuator for adjusting a mirror supporting  
15 plate provided with a mirror glass, and wherein the data processing unit is mounted on the actuator.
4. A wing mirror unit according to claim 1, 2 or 3, wherein the observation unit comprises an optical camera.
5. A wing mirror unit according to claim 1, 2 or 3, wherein the  
20 observation unit comprises a transmitter for generating an electromagnetic actuation signal and a receiver for receiving an electromagnetic reflection signal.
6. A wing mirror unit according to claim 5, wherein the transmitter and the receiver are arranged to respectively generate and receive radar signals.
- 25 7. A wing mirror unit according to claim 5, wherein the transmitter and the receiver are integrated.

8. A wing mirror unit according to any one of the preceding claims, comprising a mirror housing mounted on the supporting frame, which substantially forms the exterior of the wing mirror unit, wherein the observation unit is located in the mirror housing.
- 5 9. A wing mirror unit according to any one of the preceding claims, wherein the observation unit is disposed on the actuator.
10. A wing mirror unit according to any one of the preceding claims, wherein the observation unit generates two electromagnetic actuation signals which spatially overlap each other partly.
- 10 11. A wing mirror unit according to any one of the preceding claims, wherein the detection system comprises a second observation unit for generating observation data in a second blind spot diagonally before the driver.
12. A wing mirror unit according to any one of the preceding claims,  
15 wherein the indication unit comprises an optical indicator.
13. A wing mirror unit according to claim 12, wherein the optical indicator is disposed on the mirror supporting plate for generating an optical signal.
14. A wing mirror unit according to claim 13, wherein at the location of  
20 the optical indicator the mirror glass comprises semi-permeable optical material, so that a signal generated by the optical indicator passes through the semi-permeable optical material out of the wing mirror unit.
15. An actuator for adjusting a mirror supporting plate provided with a mirror glass with respect to a supporting frame on which the actuator is  
25 mounted, wherein on the actuator a data processing unit is disposed for processing observation data generated by an observation unit for detecting an object in a blind spot of a wing mirror unit.